Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

property, expects its first commercial product to go to market in late 2020.

And in other news, UNSW Sydney has secured more than A$4.9 million (US$3.5 million) over five years in Australian Research Council funding to establish the **ARC Training Centre for the Global Hydrogen Economy**. The project will engage Australian researchers – from UNSW, University of Newcastle, University of Queensland, Curtin University, and University of Sydney – to develop hydrogen technologies and innovations to aid the global transition to renewable energies.

The centre – led jointly by Aguey-Zinsou and Scientia Professor Rose Amal – will bring together global research institutions, industry partners, government agencies and hydrogen startups to form a multidisciplinary and international consortium. It will focus on key themes including the production, storage and utilisation of hydrogen; development of appropriate safety systems and controls; and commercialisation, public acceptance, and the skills that industry will require in a hydrogen economy.

UNSW, Materials Energy Research Laboratory in nanoscale: www.merlin.unsw.edu.au

GHD, Hydrogen: www.ghd.com/hydrogen

Providence Asset Group: www.providences.com.au

Hydrogen Council grows to 90+ members

The Hydrogen Council has announced 11 new members, bringing the total to 92 participating organisations, and boosting the industry's commitment to leveraging hydrogen solutions in building a cleaner, more resilient post-Covid global economy.

The Hydrogen Council, founded in 2017 [*FCB, January 2017, p1*], is a CEO-led global initiative of leading energy, transport, industrial and investment companies with a united vision for hydrogen to foster the energy transition. The Council has grown from 13 founding companies to 92 members in just three years [*April 2018, p13, October 2018, p14 and July 2019, p14*]. The new joiners include two steering members (CMA CGM [*see also page 6*] and Microsoft [*see also page 7*]); seven supporting members (Baker Hughes, Clariant, Mahle, NYK Line, Port of Rotterdam [*see also page 4*], TechnipFMC and Umicore); and two investors (Mubadala Investment Company and Providence Asset Group [*see also the item above*]).

These additions mirror the wide range of geographical interest in hydrogen – with companies headquartered in Europe, Asia, Australia, the US and United Arab Emirates – as well as representing sectors such as chemicals (Clariant), automotive (Mahle), energy and materials technology (Baker Hughes, TechnipFMC, Umicore), shipping (CMA CGM, NYK Line), industrial ports (Port of Rotterdam), and digital (Microsoft). Mubadala and Providence are joining the Council's Investor Group, established in January to bridge the gap between the investor community and the hydrogen industry and facilitate investment in large-scale projects [*February 2020, p13*].

Meanwhile, the Hydrogen Council has issued a **position paper** calling on governments around the world to invest in hydrogen as part of their Covid-19 recovery plans. It includes a useful summary of how hydrogen features in recovery plans in Australia, China, Japan, South Korea, the European Union, Germany, the US, California, and Canada.

Hydrogen Council: www.hydrogencouncil.com

Position paper (PDF): https://tinyurl.com/h2-council-covid-recovery

IEA Hydrogen TCP refocuses on hydrogen use, wider collaboration

The International Energy Agency's Hydrogen Technology Collaboration Programme (TCP) is undergoing a major renovation, to serve as the ideal tool for international collaboration in boosting hydrogen technologies worldwide. This is based on a new strategic work plan with ambitious goals, a new leadership team, and a new technical secretariat.

The new Strategic Work Plan (2020–2025) sets ambitious goals to make the most of the current international momentum on hydrogen, focusing on it as a facilitator for a smart, sustainable and decarbonised energy system based on renewables and low-carbon technologies for transport, industry, building, power and energy network applications. The Strategic Work Plan will position the Hydrogen TCP as a hub for international collaboration on hydrogen research, development and demonstration (R&DD) within the IEA Secretariat, the IEA Technology Network and the greater energy community, while closely cooperating with the new IEA hydrogen initiative.

The newly elected leadership team – Paul Lucchese (CEA, France) as Chairman, and Eiji Ohira (NEDO, Japan) and Marcel Weeda (TNO, Netherlands) as Vice-Chairmen – will encourage greater participation of the Executive Committee members to help with implementing different parts of the Plan.

Ariema Energía y Medioambiente SL – a Spanish hydrogen technologies company, offering specialised engineering and consulting services as well as electrolyser commercialisation – will support the IEA Hydrogen TCP with future developments.

Innovation-driven research by the IEA Hydrogen TCP will contribute to the global clean energy transition, optimising integrated systems and adding value to the global energy supply chain [*e.g. FCB, July 2019, p15*].

IEA Hydrogen TCP: www.ieahydrogen.org

Strategic Plan 2020–2025: https://tinyurl.com/iea-h2tcp-strategy-plan

Ariema: www.ariema.com

Australian Hydrogen Council links with five industry associations

The Australian Hydrogen Council has signed a series of Memorandums of Understanding with key organisations in Australia and beyond to collaborate on hydrogen issues, share information, and facilitate project partnerships to fast-track the commercial deployment of hydrogen technologies.

AHC has new partnerships with Bioenergy Australia, the Clean Energy Council (Renewable Energy Australia), Canadian Hydrogen and Fuel Cell Association, Asia-Pacific Hydrogen Association in Singapore, and New Zealand Hydrogen Association. These are in addition to AHC's existing MOUs with H2Korea (Hydrogen Convergence Alliance Promotion Group), Energy Networks Australia, and the Federal Chamber of Automotive Industries.

'These MOUs will help the AHC stay connected to – and work with – other related industries, which will increase Australia's access to global research and relevant insights,' says Dr Fiona Simon, CEO of AHC. 'Both the APAC [Asia–Pacific] region and Canada are home to incredible hydrogen research and developing industries. Working together, we can share policy and technology options that will help fast-track industry development.'

The Australian government unveiled its national hydrogen strategy last November, and pledged A$300 million (US$216 million) to jumpstart hydrogen projects and help build the industry by 2030 [*see also page 13*]. The country sees great potential for the export of 'green' hydrogen [*FCB, September 2018, p14*]; the Australian Renewable Energy Agency (ARENA) is providing funding to help fast-track development of renewably produced